

IN THE CLAIMS:

Please amend the claims as follows. The claims are in the format required by 35 C.F.R. §1.121.

1. (Currently amended) A system comprising:
a noise shaper configured to receive an input audio signal and perform a noise shaping process including re-quantizing the input audio signal to produce a processed audio signal and shifting quantization noise in the processed audio signal out of an audio band;
a detector coupled to the noise shaper and configured to detect ~~[[a]]~~ clipping condition of the input in an audio signal in the noise shaper;
a signal processor coupled to receive a feedback signal from the detector;
wherein the signal processor is configured to modify the input audio signal in response to the feedback signal received from the detector, wherein the modification of the input audio signal is a function of the detected clipping.
2. (Currently amended) The system of claim 1, wherein modification of the input audio signal by the signal processor is variable.
3. (Canceled)
4. (Currently amended) The system of claim 1 ~~[[3]]~~, wherein the system comprises one or more components of a digital audio amplifier.
5. (Currently amended) The system of claim 1, wherein the signal processor is configured to modify the input audio signal by clipping the input audio signal.
6. (Currently amended) The system of claim 1, wherein the signal processor is configured to modify the input audio signal by compressing the input audio signal.
7. (Currently amended) The system of claim 6, wherein the signal processor is configured to modify the input audio signal by compressing only a portion of the input audio signal that exceeds a threshold amplitude level.

8. (Original) The system of claim 1, further comprising a filter coupled between the detector and the signal processor, wherein the filter is configured to filter the feedback signal of the detector.
9. (Original) The system of claim 8, wherein the clip filter comprises a counter that is incremented for each clock cycle in which the output signal of the clip detector is asserted and that is reset on each clock cycle in which the output signal of the clip detector is not asserted.
10. (Currently amended) The system of claim 9, wherein the clip filter is configured to assert the filtered feedback output signal when the counter reaches a threshold level.
11. (Original) The system of claim 8, further comprising a flag circuit coupled between the filter and the signal processor, wherein the flag circuit is configured to receive the filtered feedback signal and, if the filtered feedback signal is in an asserted state, to maintain the filtered feedback signal in the asserted state until the flag circuit is reset by the signal processor.
12. (Original) The system of claim 1, wherein the clipping condition comprises simple clipping of the audio signal.
13. (Currently amended) A method comprising:
receiving an input audio signal in a noise shaper;
re-quantizing the input audio signal to produce a processed audio signal;
shifting quantization noise in the processed audio signal out of an audio band;
detecting [[a]] clipping condition in an of the input audio signal in the noise shaper;
modifying the input audio signal as a function of the detected clipping in response to
detecting the clipping condition of the input audio signal.
14. (Currently amended) The method of claim 13, wherein modifying the input audio signal comprises modifying the input audio signal in a variable manner.
15. (Canceled)

16. (Currently amended) The method of claim ~~13~~ 45, wherein ~~the~~ a processed audio signal output by the noise shaper is amplified in a digital audio amplifier.
17. (Currently amended) The method of claim 13, wherein modifying the input audio signal comprises clipping the input audio signal.
18. (Currently amended) The method of claim 13, wherein modifying the input audio signal comprises compressing the input audio signal.
19. (Currently amended) The method of claim 18, wherein modifying the input audio signal comprises compressing only a portion of the input audio signal that exceeds a threshold amplitude level.
20. (Currently amended) The method of claim 13, further comprising filtering a feedback signal corresponding to ~~[[a]]~~ detected clipping ~~condition~~, wherein modifying the input audio signal in response to detecting the clipping ~~condition~~ comprises modifying the input audio signal in response to the filtered feedback signal.
21. (Original) The method of claim 20, wherein filtering the feedback signal comprises incrementing a counter in response to assertion of the feedback signal and resetting the counter in response to de-assertion of the feedback signal.
22. (Original) The method of claim 21, wherein filtering the feedback signal further comprises asserting the filtered feedback signal when the counter reaches a threshold level.
23. (Currently amended) The method of claim 20, further comprising, if the filtered feedback signal is asserted, maintaining assertion of the filtered feedback signal until the input audio signal is modified in response to the filtered feedback signal.
24. (Original) The method of claim 13, wherein the clipping condition comprises simple clipping of the audio signal.